

ONE NEW SPECIES OF *ACTORTHIA* KRÖBER (DIPTERA, THEREVIDAE) FROM CHINA

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Abstract One species, *Actorthia plana* Liu, Wang et Yang, sp. nov., from Inner Mongolia is described. This new species can be separated from *A. korlovi* Zaitzev by the anterior edge of sternite 8 invaginated and dorsal apodeme of the aedeagus flat in lateral view. The specimens examined are deposited in China Agricultural University (CAU), Beijing and Institute of Grassland Research (IGR), Hohhot.

Key words Diptera, Therevidae, Phycinae, *Actorthia*, new species, China.

Since Zaitzev (1974) described *Actorthia korlovi* as a new species from Xinjiang, no other new finding of this genus was reported in China. Fifteen species of this genus distributing from North Africa to Central Asia have been described in the world. Although Lyneborg (1983) stated that *Actorthia* was very much in need of revision, and the specimens caught are always very shabby, we still try to record something new to expand it. This paper will be helpful to the future research of *Actorthia*, even the subfamily Phycinae in China, as this subfamily at present seems much fewer than Therevinae.

The specimens were studied and illustrated with an OPTEC SMZ-B₂ stereomicroscope. Male and female genitalic preparations were made by removing and heating the apical portion of the abdomen in lactic acid at 180 °C temperature for 15 min, and rinsing in water and 75 % ethanol. After examination, preparations were transferred to fresh glycerin and stored in a microvial pinned below the specimen. The photographs of adults were taken with a digital camera (Canon EOS 450D). The studied specimens are deposited in China Agricultural University (CAU), Beijing and Institute of Grassland Research (IGR), Hohhot.

Actorthia Kröber, 1912

Actorthia Kröber, 1912: 3. Type species: *Actorthia frontata*

Kröber, 1912, by monotypy.

Gyrophthalmus Becker, 1912: 311.

Lesneus Surcouf, 1921: 161.

Gyrophthalmus Frey, 1937: 52.

The genus *Actorthia* is characterized by the following features (Lyneborg, 1983): male eyes

contiguous, female frons broad with polished black calli; parafacial with pile; first flagellomere narrower than scape, with 2-segment apical style; prosternum with pile, scutellum with 1–3 pairs macrosetae; fore tibia often incrassate apically and with an unusually rich vestiture of setae. Male genitalia: sternite 8 triangular; outer gonocoxal process long and finger-shape; hypandrium large; apical distiphallus suddenly downcurved.

Actorthia plana Liu, Wang et Yang, sp. nov. (Figs 1–2, 3–13)

Diagnosis. Antennal scape to basal pedicel brown, apical pedicel to first flagellomere black; scutellum only with 1 pair of macrosetae; legs brownish yellow; abdomen dark brown; male sternite 8 with anterior invagination; dorsal apodeme of aedeagus flat in lateral view.

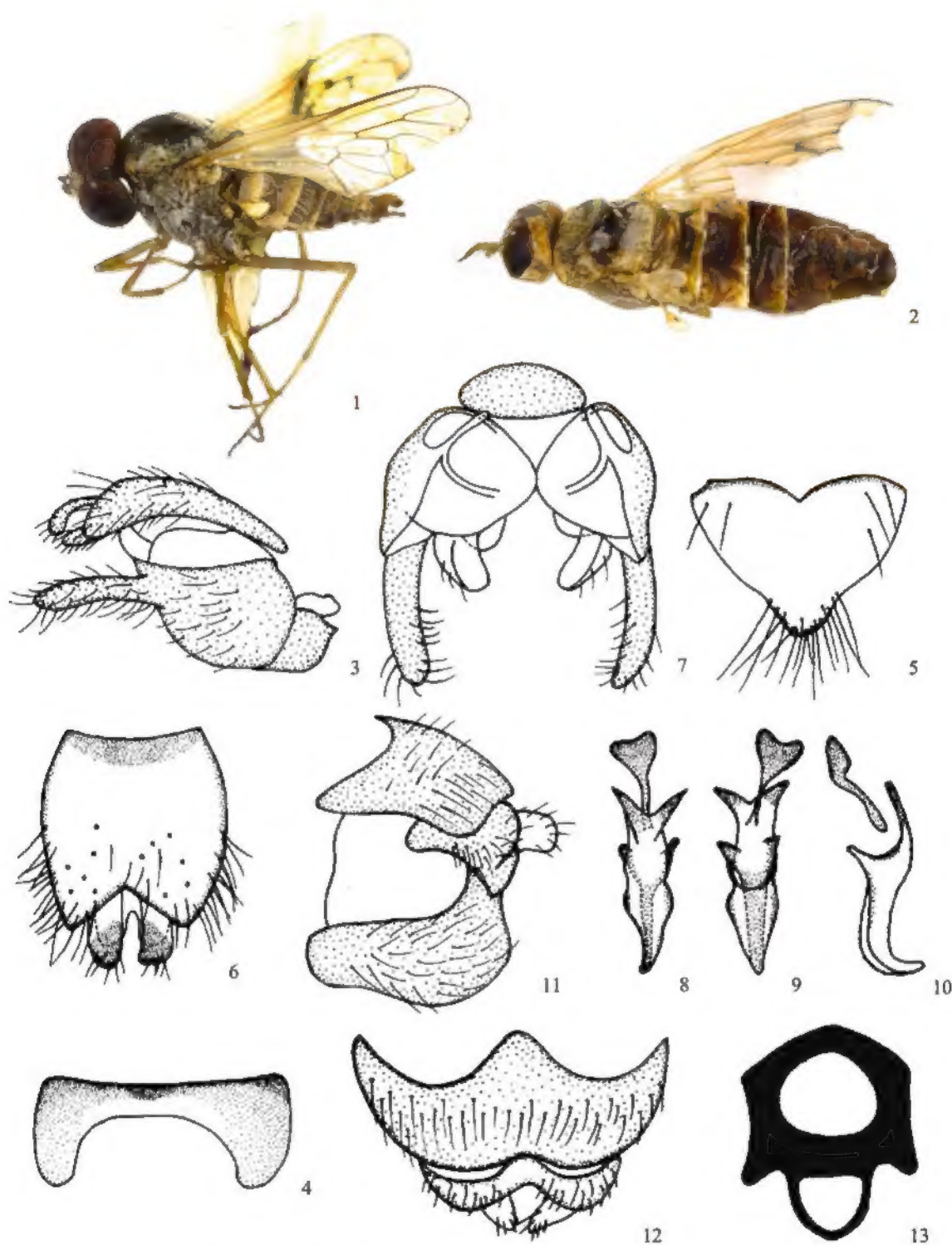
Male. Body length 4.6–5.7 mm, wing length 4.0–4.5 mm.

Head with dense pale pubescence in black ground color. Parafacial and gena covered with white pile, ocellar tubercle and occiput bare, postocular setae yellow. Ocelli brown. Eyes reddish brown and nearly contiguous with strip-like frons less than width of anterior ocellus. Antenna with pale pubescence, scape to basal pedicel brown, apical pedicel to first flagellomere black; short black pile on antenna mixed with several black setae on apical scape; scape medially long, pedicel oval, first flagellomere acute, 2-segment style resting apically on first flagellomere with a tiny distal spine; antennal ratio: 2.8 : 1.0 : 3.8 : 0.7. Proboscis dark brown with short sparse white pile; palpus yellowish brown with recumbent white pile.

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Figs 1 – 13. *Actorthia plana* Liu, Wang *et* Yang, sp. nov. 1. Male. 2. Female. 3 – 10. Male genitalia. 11 – 13. Female genitalia. 3, 11 – 12. Terminalia. 4. Tergite 8. 5. Sternite 8. 6. Epandrial complex. 7. Gonocoxal complex. 8 – 10. Aedeagus. 13. Furca. 3, 10 – 11. Lateral view. 6 – 8, 12. Dorsal view. 9. Ventral view.

Thorax with pale pubescence over black ground color; mesonotum with a wide black central vitta. Sparse light brown pile on margin of mesonotum and scutellum, sparse white pile on pleuron; macrosetae on thorax black. Scutal chaetotaxy (pairs): *np* 2, *sa* 1,

pa 1, *dc* 1, *sc* 1. Legs brownish yellow except tarsi dark brown apically, pulvilli dark brown. Legs with black pile and black setae, but coxae and posteroventral surfaces of fore and mid femora with long white pile. Fore coxa with *a* 1, *av* 1. Fore femur

with *av* 6–7; mid femur with *av* 3; hind femur with *ad* 1, *av* 3. Fore tibia apically with 4 setae; mid tibia with *ad* 1, *av* 1, *pv* 1, apically with 7 setae; hind tibia with *ad* 6, *av* 5, apically with 4 setae. Wing hyaline without pterostigma; veins yellow basally and brown marginally; cell *m*₃ closed with short petiole apically. Halter stalk brownish yellow; knob pale yellow.

Abdomen dark brown with pale pubescence, posterior margin of each tergite brownish yellow. Both sides of tergites with white pile, sternites and terminalia with short black pile. Male genitalia: epandrium 1.1 times longer than wide, with a triangular apical incision. Subepandrial sclerite shorter than cercus and with a deep apical incision. Hypandrium large. Outer gonocoxal process nearly as long as gonocoxite. Gonostylus short and incurved. Aedeagus with forked ventral apodeme; ejaculatory apodeme with heart-shaped basal part; distiphallus curved down.

Female. Body length 6.1–6.5 mm, wing length 4.5–5.0 mm. Similar to male except frons rather wide, 8.8 times wider than anterior ocellus; frons shiny brown, covered with pale pubescence and some short black pile medially.

Holotype male, China, Inner Mongolia, Suniteyou Qi (42°34'N, 112°38'E; alt. 1 148 m), 22 July 2010, WANG Ning. Paratypes: 7 ♂♂, 2 ♀♀, China, Inner Mongolia, Sunitezuo Qi (43°02'N, 112°49'E; alt. 1 024 m), 23–25 July 2010, WANG Ning; 2 ♂♂, 1 ♀, China, Inner Mongolia, Hangjin Qi (39°54'N, 108°19'E; alt. 1 254 m), 11–12 Aug.

2010, WANG Ning.

Distribution. Palaearctic Region (China, Inner Mongolia).

Etymology. The specific epithet refers to the flat dorsal apodeme of the aedeagus.

Remarks. This new species can be separated from *A. kozlovi* Zaitzev by the following features: anterior edge of sternite 8 invaginated; dorsal apodeme of aedeagus flat in lateral view. In *A. kozlovi*, the anterior edge of sternite 8 is smooth (Fig. 12, Zaitzev, 1974); the dorsal apodeme of the aedeagus is distinctly raised in lateral view (Fig. 14, Zaitzev, 1974).

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中国厚胫剑虻属 (双翅目, 剑虻科) 一新种

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摘要 记述采自内蒙古的花剑虻亚科厚胫剑虻属 1 新种, 平滑厚胫剑虻 *Actorthia plana* Liu, Wang et Yang, sp. nov.。研究标本分别保存在中国农业大学和中国农业科学院草原研究所。

平滑厚胫剑虻, 新种 *Actorthia plana* Liu, Wang et Yang, sp. nov. (图 1~2, 3~13)

本种与分布于新疆的科氏厚胫剑虻 *Actorthia kozlovi* Zaitzev 的区别在于第 8 腹板前缘凹陷, 阳茎背面突侧面观相对平滑。

关键词 双翅目, 剑虻科, 花剑虻亚科, 厚胫剑虻属, 新种, 中国。
中图分类号 Q969.448.6

而后者第 8 腹板前缘平整, 阳茎背面突侧面观显著隆起。

正模 ♂, 内蒙古自治区苏尼特右旗 (42°34'N, 112°38'E; 海拔 1 148 m), 2010-07-22, 王宁采。副模: 7 ♂♂, 2 ♀♀, 内蒙古自治区苏尼特左旗 (43°02'N, 112°49'E; 海拔 1 024 m), 2010-07-23~25, 王宁采; 2 ♂♂, 1 ♀, 内蒙古自治区杭锦旗 (39°54'N, 108°19'E; 海拔 1 254 m), 2010-08-11~12, 王宁采。

词源: 新种种名意指阳茎背面突平滑。

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